Bruhat Bangalore Mahanagara Palike
Executive Engineer Byatarayanapura Division

Name of Work: Modified Estimate for Improvements to Roads and Drains at Nanjappa Layout Main Road, Cross Roads, Rammanna Garden and Surrounduing araes in Ward No.14 (Vidyaranyapura)

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
1	Removing and resetting of footpath slab								
	Nanjappa Layout 1st From Ramchandrapura Main To Vidyaranyapua Main Rd								
	From Ramchandrapura Main	2	493.30	0.90		842.29			
	Culverts	11	6.70	1.50		110.55			
						952.84	**Cum**		
					Upto 125%	**853.13**	**Cum**	**246.63**	**210406.22**
					Above 125%	**99.71**	**Cum**	**246.63**	**24,591.86**
	Approved Rate	**246.63**							
2	Earth work Excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work								
	Nanjappa Layout 1st From Ramchandrapura Main To Vidyaranyapua Main Rd								
	From Ramchandrapura Main To Vidyaranyapua Main Rd	2	493.30	0.60	0.50	301.27			
	Culverts	11	6.70	1.20	0.40	35.38			
	Burm Cutting								
	Nanjappa Layout 1st From Ramchandrapura Main To Vidyaranyapua Main Rd								
	From Ramchandrapura Main To Vidyaranyapua Main Rd	2	605.00	0.50	0.30	181.50			
	8th Cross Rd	2	**119.40**	0.60	0.35	50.15			
						568.29	**Cum**		
					Upto 125%	**496.69**	**Cum**	**214.73**	**106653.71**
					Above 125%	**71.60**	**Cum**	**214.73**	**15,375.57**
	Approved Rate	**214.73**							
3	Providing and laying in position Plain Cement Concrete Mix 1:3:6 (M10) for levelling course for all works in foundation. Using 40 mm nominal size graded crushed coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications								
						0.00	**Cum**	**6411.82**	**0.00**
	Approved Rate	**6411.82**							
4	Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6 (1 cement : 6 coarse sand)								

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
						0.00	Cum	6259.43	0.00
	Approved Rate	**6259.43**							
5	Providing ruled pointing to cursed stone masonry with lime mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost all materials, labour, usage charges of machinery, curing complete as pre specification								
						0.00	Sqm	274.76	0.00
	Approved Rate	**274.76**							
6	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite / trap / basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately Mix 1:3:6 (M10) Using 20 mm nominal size graded crushed coarse aggregate								
						0.00	Nos	6612.69	0.00
	Approved Rate	**6612.69**							
7	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M20 (The cost of steel reinforcement & formwork to be paid separately)								
	Drain Coping								
	Nanjappa Layout 1st From Ramchandrapura Main To Vidyaranyapua Main Rd								
	From Ramchandrapura Main To Vidyaranyapua Main Rd	4	355.70	0.15	0.10	21.34			
						21.34	**Cum**	**7234.25**	**154393.36**
	Approved Rate	**7234.25**							
8	Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications.								
						0.00	**m**	**106405.33**	**0.00**
	Approved Rate	**106405.33**							
9	Providing and Fixing pre cast Covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting, including form work,curing, including cost of all materials, labour, hire charges of machinery, loading,								
	Nanjappa Layout 1st From Ramchandrapura Main To Vidyaranyapua Main Rd								
	Missing/ Damage Slabs	120	0.60	0.90		64.62			
						64.62	**Sqm**	**2174.56**	**140523.98**

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Approved Rate	**2174.56**							
10	Providing and Fixing pre cast Covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, complete. As per Engineer incharge								
	Nanjappa Layout 1st From Ramchandrapura Main To Vidyaranyapua Main Rd								
	Missing/ Damage Slabs	8	0.60	1.50		7.20			
		15	0.60	1.20		10.80			
						18.00	**Sqm**	**5286.33**	**95153.94**
	Approved Rate	**5286.33**							
11	Earth work in surface Excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of								
	Asphalt Road								
	Nanjappa Layout 1st From Ramchandrapura Main To Vidyaranyapua Main Rd								
	From Ramchandrapura Main To Vidyaranyapua Main Rd	1	605.00	1.10	0.25	166.38			
	8th Cross Rd	1	119.40	1.15	0.25	38.72			
	Pot Holes								
		10	4.00	2.00	0.25	20.00			
		12	2.00	3.00	0.25	18.00			
		8	5.00	2.60	0.25	26.00			
		9	3.00	4.00	0.25	27.00			
						296.10	**Cum**		
					Upto 125%	**284.38**	**Cum**	**75.04**	**21339.50**
					Above 125%	**11.72**	**Cum**	**75.04**	**879.58**
	Approved Rate	**75.04**							
12	Providing, laying, spreading and compacting graded stone aggregate to Wet Mix Macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density								
	Asphalt Road								
	Nanjappa Layout 1st From Ramchandrapura Main To Vidyaranyapua Main Rd								
	From Ramchandrapura Main To Vidyaranyapua Main Rd	1	605.00	1.10	0.25	166.38			
	8th Cross Rd	1	119.40	1.30	0.25	38.72			
	Pot Holes								
		10	4.00	2.00	0.25	20.00			
		12	2.00	3.00	0.25	18.00			
		8	5.00	2.60	0.25	26.00			
		9	3.00	4.00	0.25	27.00			
						296.09	**Cum**	**2763.75**	**818319.73**
	Approved Rate	**2763.75**							
13	Providing and applying Primer Coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using mechanical								
	Asphalt Road								

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Nanjappa Layout 1st From Ramchandrapura Main To Vidyaranyapua Main Rd								
	From Ramchandrapura Main To Vidyaranyapua Main Rd	1	605.00	1.10		665.50			
	8th Cross Rd	1	119.40	1.30		154.86			
	Pot Holes								
		10	4.00	2.00		80.00			
		12	2.00	3.00		72.00			
		8	5.00	2.60		104.00			
		9	3.00	4.00		108.00			
						1184.36	**Sqm**	**48.49**	**57429.76**
	Approved Rate	**48.49**							
14	Providing and laying Dense Graded Bituminous Macadam with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification								
	Asphalt Road								
	Nanjappa Layout 1st From Ramchandrapura Main To Vidyaranyapua Main Rd								
	From Ramchandrapura Main To Vidyaranyapua Main Rd	1	365.00	1.10	0.05	20.08			
		1	240.00	4.90	0.05	59.12			
	8th Cross Rd	1	119.40	1.30	0.05	7.76			
	Pot Holes								
		10	4.00	2.00	0.05	4.00			
		12	2.00	3.00	0.05	3.60			
		8	5.00	2.60	0.05	5.20			
		9	3.00	4.00	0.05	5.40			
						105.16	**Cum**		
					Upto 125%	**71.10**	**Cum**	**10550.52**	**750141.97**
					Above 125%	**34.06**	**Cum**	**10550.52**	**359304.06**
	Approved Rate	**10550.52**							
15	Providing and applying Tack Coat with RS1 Bituminous Emulsion using emulsion pressure distributor at the rate of 0.25 kg/m2 on the prepared bituminous surface cleaned with mechanical broom								
	Asphalt Road								
	For BC								
	Nanjappa Layout 1st From Ramchandrapura Main To Vidyaranyapua Main Rd								
	From Ramchandrapura Main To Vidyaranyapua Main Rd	1	605.00	5.10		3085.50			
	8th Cross Rd	1	119.40	4.90		650.47			
						3735.97	**Sqm**	**16.16**	**60373.27**
	Approved Rate	**16.16**							
16	Providing and laying Bituminous Concrete with 40/60 TPH capacity hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 percent of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade,level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification								

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Asphalt Road								
	Nanjappa Layout 1st From Ramchandrapura Main To Vidyaranyapua Main Rd								
	From Ramchandrapura Main To Vidyaranyapua Main Rd	1	605.00	5.10	0.04	123.70			
	8th Cross Rd	1	119.40	4.90	0.04	23.40			
	Deducton Of Chambers	-18	1.50	1.00	0.04	-1.08			
						146.02	**Cum**	**12249.87**	**1788727.18**
	Approved Rate	**12249.87**							
17	Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 g/ m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be level, uniform and free from streaks and holes								
	Asphalt Road								
	Nanjappa Layout 1st From Ramchandrapura Main To Vidyaranyapua Main Rd								
	From Ramchandrapura Main To Vidyaranyapua Main Rd	2	605.00	0.10		121.00			
	8th Cross Rd	2	119.40	0.10		23.88			
						144.88	**Sqm**	**551.83**	**79949.13**
	Approved Rate	**551.83**							
18	Loading and Unloading of Stone Boulder / Stone aggregates / Sand / Kankar / Moorum. (Tipper 14 m3)								
	From Item No-02					568.29			
	From Item No-11					296.10			
						864.39	**Cum**		
					Upto 125%	**710.76**	**Cum**	**85.43**	**60720.44**
					Above 125%	**153.63**	**Cum**	**85.43**	**13124.24**
	Approved Rate	**85.43**							
19	Cost of Haulage Excluding Loading and Unloading Taking output 18 t load and lead 10 km = 180 t.km								
	From Item No-18	1	864.39	1.28		1106.42			
						1106.42	**T.Km**		
					Upto 125%	**909.78**	**T.Km**	**121.22**	**110282.93**
					Above 125%	**196.64**	**T.Km**	**121.22**	**23836.92**
	Approved Rate	**121.22**							
								Total Construction Cost	**4891527.34**

Assistant Engineer

Assistant Executive Engineer

Executive Engineer

Technical Sanction
Accorded For Rs 4891527.34
Head of A/C 3225
CER NO :62 Dt 13.03.23

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